

Notice of Allowability

Application No.

10/084,222

Applicant(s)

SHIMOKAWA ET AL.

Examiner

Art Unit

Etienne P. LeRoux

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment of 8/8/2006.
2. ☒ The allowed claim(s) is/are 38 and 39 (renumbered 1 and 2).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>Attached</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |



Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art made of record does not teach or fairly suggest the combination of elements as recited in claim 38 as given below.

The dependent claim being definite, further limiting and fully enabled by the specification is also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donna K Mason on October 4, 2006.

[39.] 38. (New): A database management method for managing data in a database for magnetic heads, comprising the steps of:

inputting and dividing data, which arrive in sequence of time series, into segments of a predetermined size, and storing said segments together with bookmark information in a data area of a storage of said database, each of said bookmark information of a segment including time information and status information, wherein said time information is read out of a clock included in said database and wherein status information of loading is written into a currently storing segment during the storing thereby to make the currently storing segment inaccessible, thereafter status information indicating an online state is written thereby to make a stored segment accessible;

storing a segment having time information of null and status information of empty into a position next to a last segment of said segments stored in said data area;

setting, in a system definition information area of said storage, storage location management information having start segment information that points to a start segment of said segments and empty segment information that points to said segment having said time information of null and said status information of empty stored in said data area;

reading, in response to receiving further data which arrive in sequence of time series following said data divided, empty segment information out of said system definition information area thereby to point to a segment and divide said further data into segments and store the segments into said data area starting from said segment pointed

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to, wherein status information of loading is written into a currently storing segment during the storing thereby to make the currently storing segment inaccessible, thereafter status information indicating an online status is written thereby to make a stored segment accessible;

storing a segment of said further data having time information of null and status information of empty into a position next to a last segment of said segments of said further data stored in said data area;

setting, in a system definition information area of said storage, empty segment information that points to said segment of said further data having said time information of null and said status information of empty stored in said data area; and

acquiring, when a deletion operation of one or a plurality of segments having certain time information, time information out of said bookmark information of the segments having status information indicating an online status stored in said data area of said storage to decide whether said one or a plurality of segments are ones which are to be deleted, and if this decision is yes, shifting start segment information in said system definition information area, if any, to a next segment in time series fashion and setting time information of null and status information of empty into the bookmark information area of said one or a plurality of segments.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Etienne LeRoux

10/5/2006

Etienne P. LeRoux
Primary Examiner